

**FIG. 1**  
**PRIOR ART**

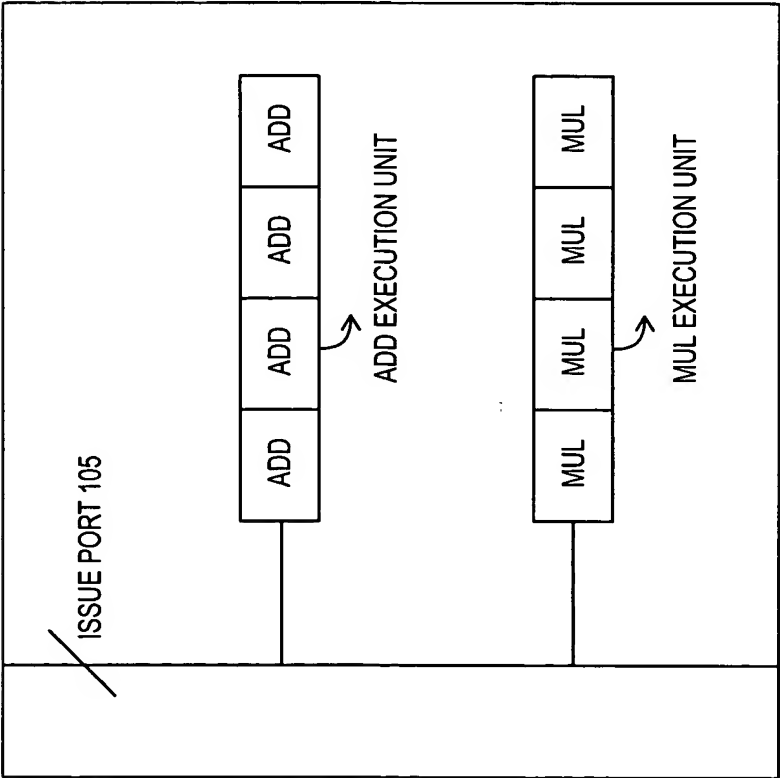
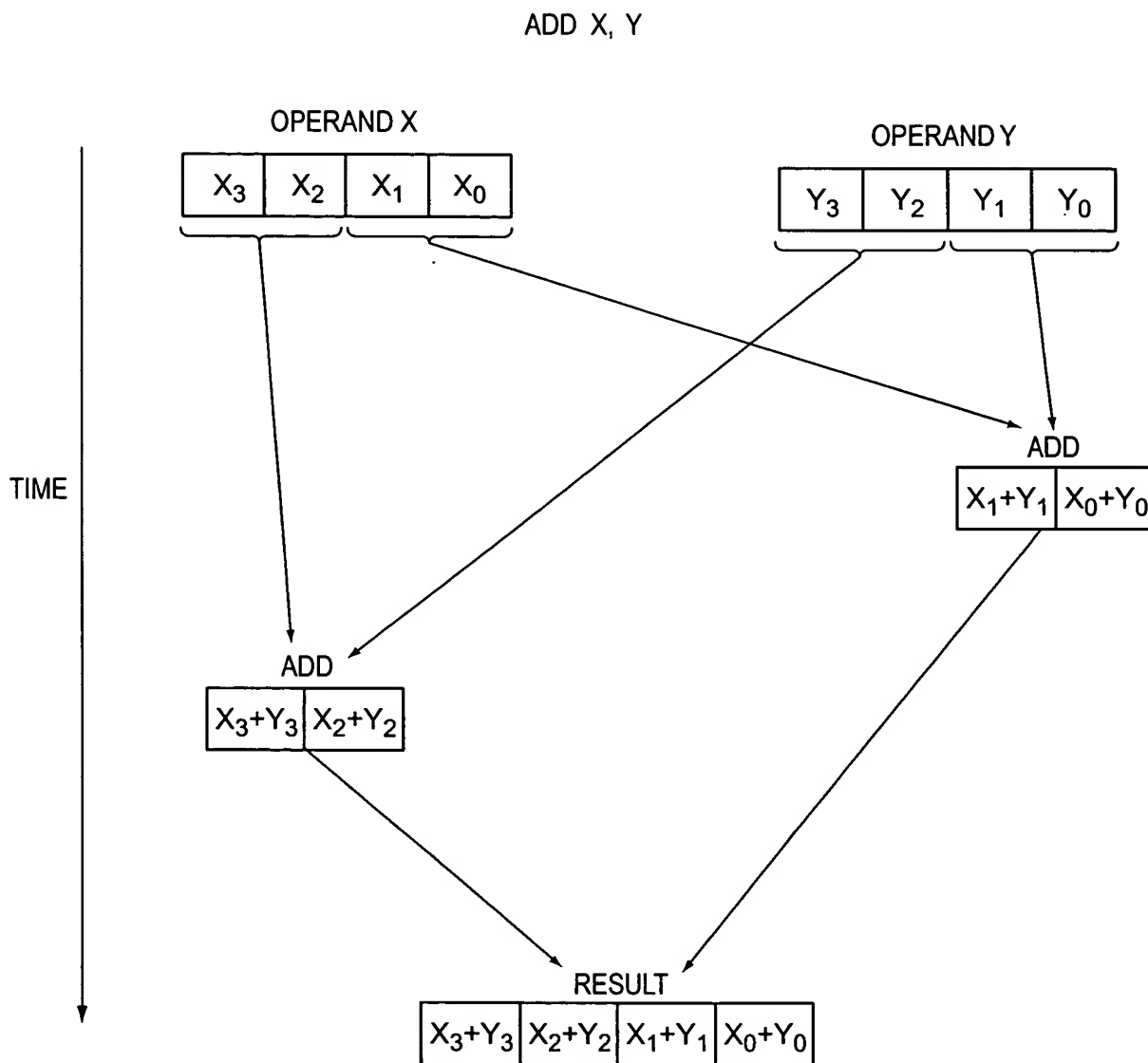


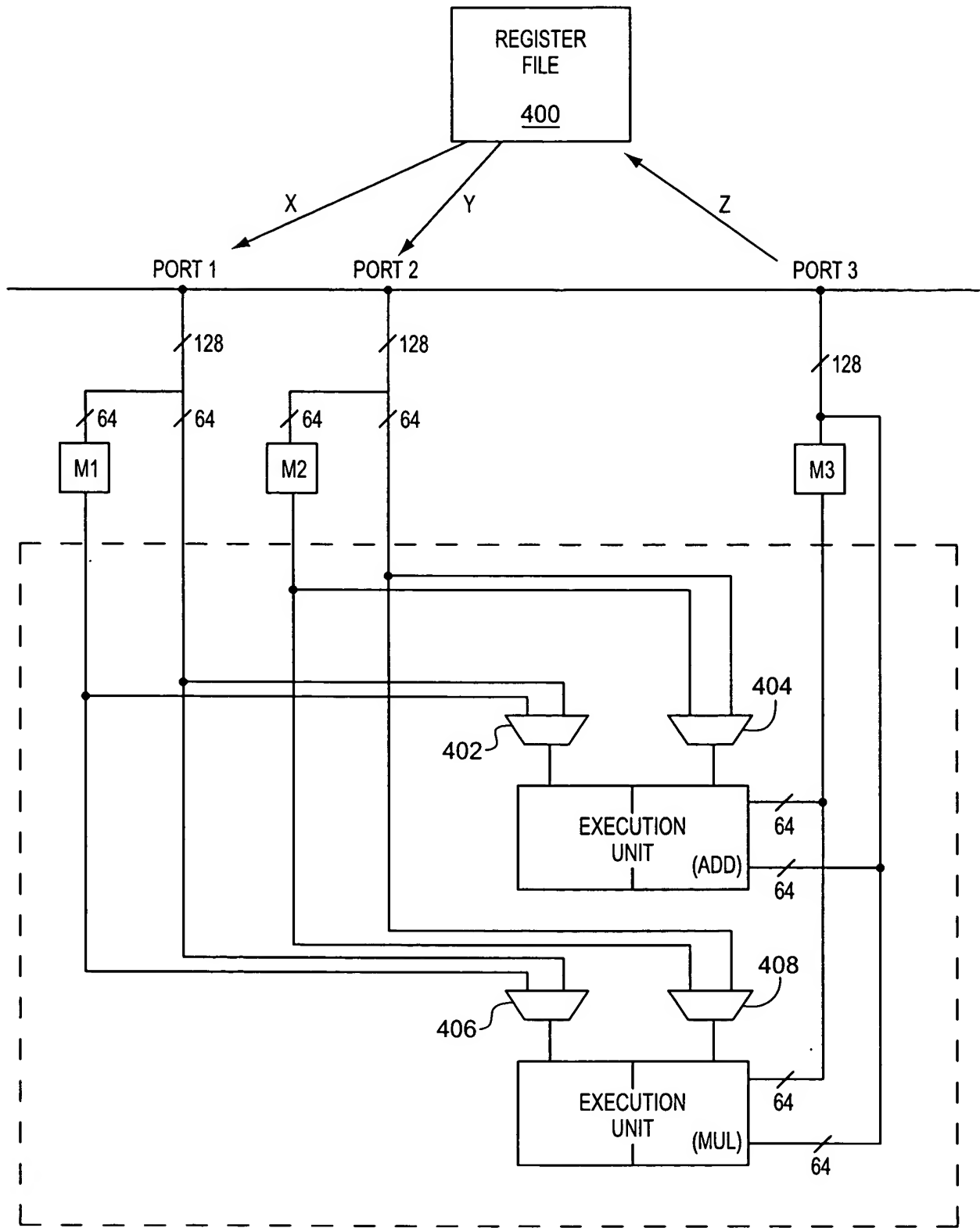
FIG. 2A

TIME	
T	ADD X, Y
T + 1	ADD A, B
T + 2	MUL X, Y
T + 3	ADD S, T

FIG. 2B



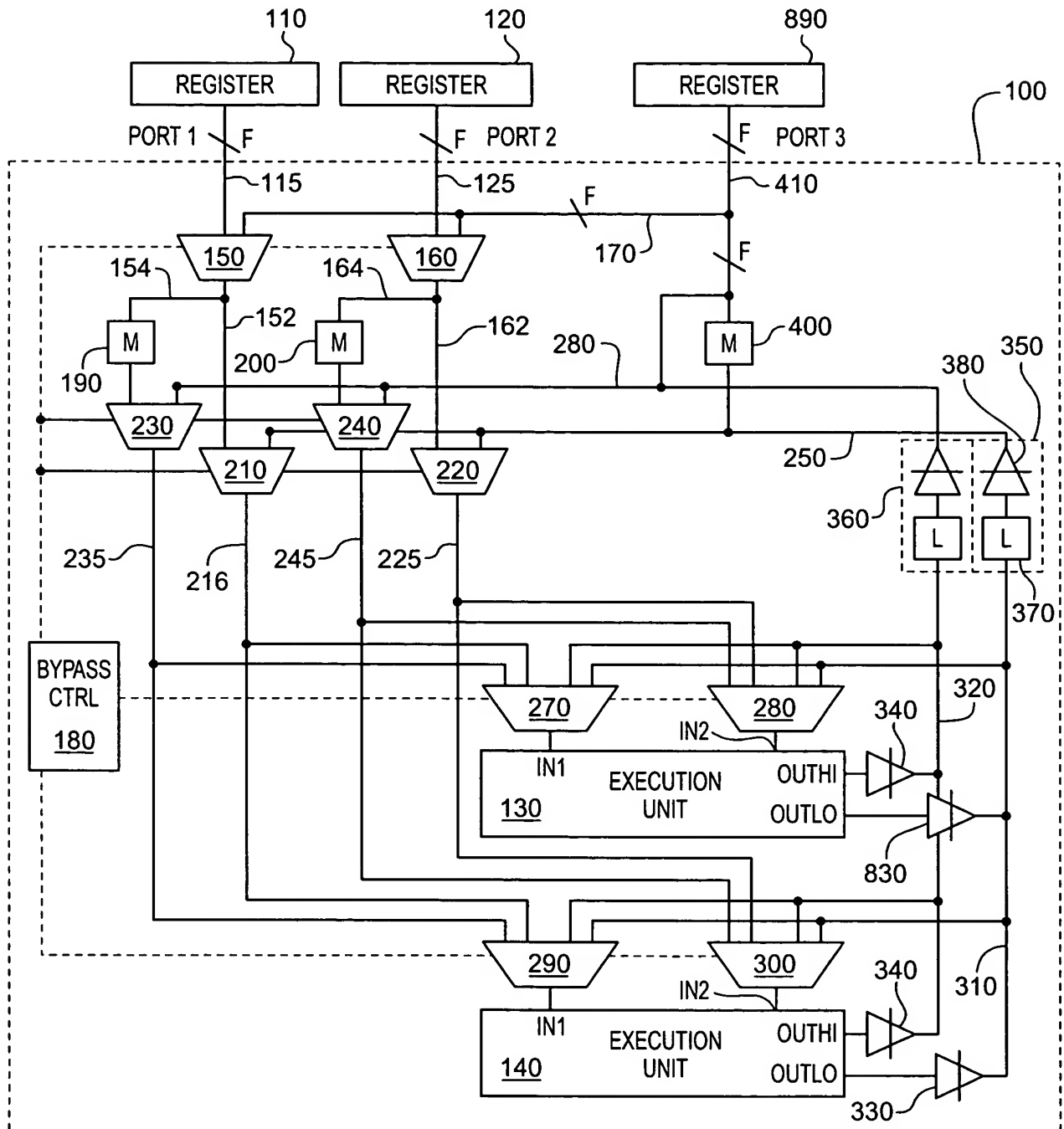
**FIG. 3**



**FIG. 4A**

TIME	128-BIT INSTRUCTION	PERFORMED ON 64-BIT DATA
T	ADD X, Y	ADD X <sub>0</sub> Y <sub>0</sub> ADD X <sub>1</sub> Y <sub>1</sub>
T+1		ADD X <sub>2</sub> Y <sub>2</sub> ADD X <sub>3</sub> Y <sub>3</sub>
T+1	MUL X, Y	MUL X <sub>0</sub> Y <sub>0</sub> MUL X <sub>1</sub> Y <sub>1</sub>
T+2		MUL X <sub>2</sub> Y <sub>2</sub> MUL X <sub>3</sub> Y <sub>3</sub>

FIG. 4B



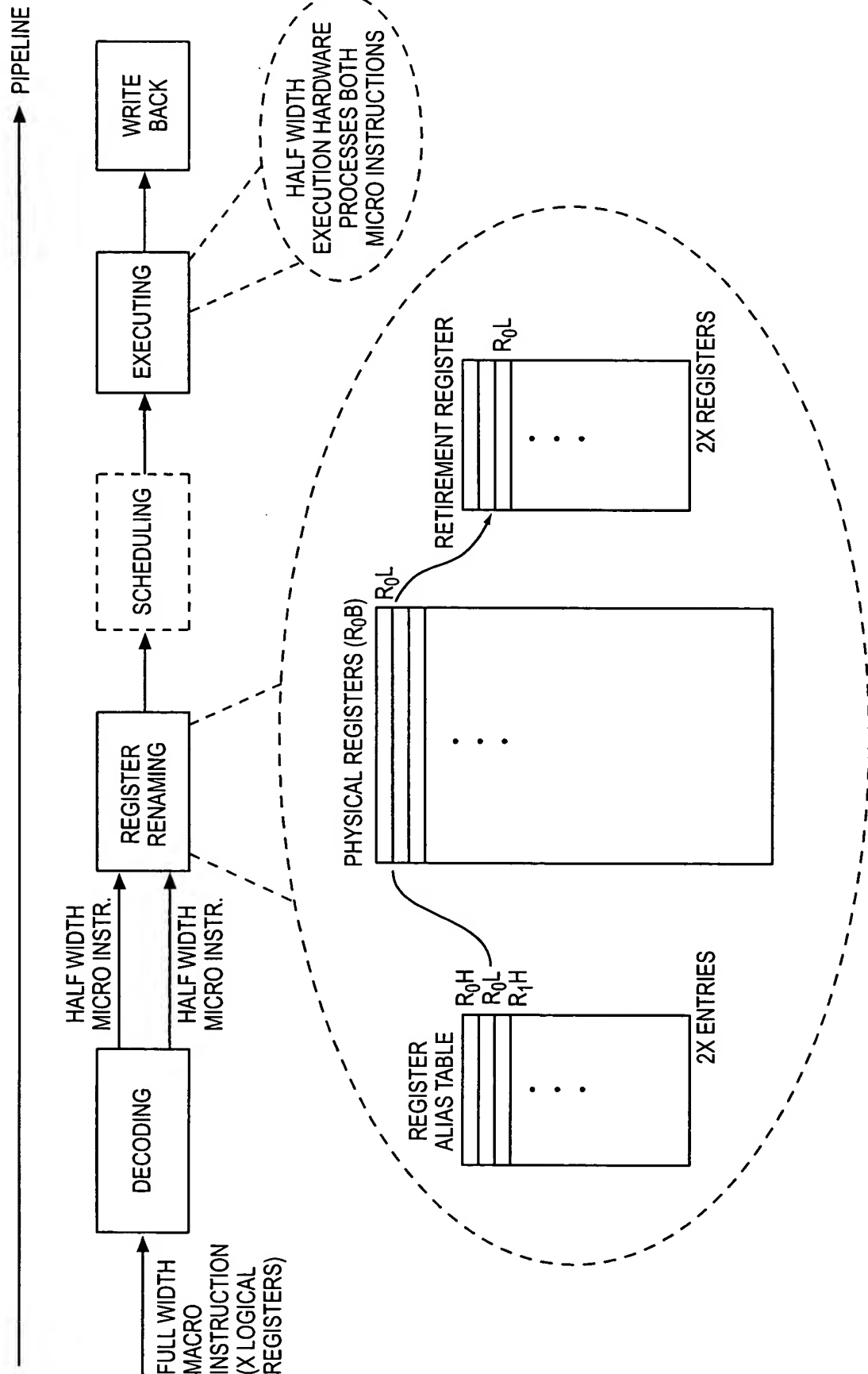


FIG. 6A

TIME	128-BIT INSTRUCTION	64-BIT INSTRUCTION
T	ADD X, Y	ADD X <sub>L</sub> , Y <sub>L</sub>
T + 1		ADD X <sub>H</sub> , Y <sub>H</sub>

FIG. 6B